



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11) **EP 0 826 711 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
13.09.2000 Bulletin 2000/37

(51) Int. Cl.⁷: **C08G 63/06**, C08G 63/12,
C08G 63/81, C08G 63/60,
C08G 63/16

(43) Date of publication A2:
04.03.1998 Bulletin 1998/10

(21) Application number: **97114395.3**

(22) Date of filing: **20.08.1997**

(84) Designated Contracting States:
**AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC
NL PT SE**

(30) Priority: **02.09.1996 JP 23171496**

(71) Applicant:
**MITSUI CHEMICALS, INC.
Tokyo (JP)**

(72) Inventors:
• **Goto, Kenichi**
Ohmuta-shi, Fukuoka-ken 836 (JP)
• **Mori, Yukiko**
Ohmuta-shi, Fukuoka-ken 836 (JP)
• **Miyamoto, Michihiko**
Ohmuta-shi, Fukuoka-ken 836 (JP)

(74) Representative:
**Strehl Schübel-Hopf & Partner
Maximilianstrasse 54
80538 München (DE)**

(54) **Preparation process of aliphatic polyester**

(57) The invention relates to a preparation process of aliphatic polyester, comprising using an ion exchange resin as a drying agent and after the dehydration polycondensation reaction, regenerating and drying the used ion exchange resin and repeatedly using said ion exchange resin in the next dehydration polycondensation reaction, in a process for preparing aliphatic polyester from one or more aliphatic compound (A) by heating in an organic solvent in the presence of a catalyst, distilling a generated water containing organic solvent out of the reaction system, treating the distilled organic solvent with a drying agent, and returning the treated solvent to the reaction system to progress a dehydration polycondensation reaction.

The process of the invention enables to steadily and efficiently prepare in industry an aliphatic polyester having an excellent color tone, high molecular weight and high quality.

EP 0 826 711 A3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 97 11 4395

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
Y	EP 0 712 880 A (MITSUI TOATSU CHEMICALS) 22 May 1996 (1996-05-22) * column 6, line 6-8; claims 1-4 *	1	C08G63/06 C08G63/12 C08G63/81 C08G63/60 C08G63/16
Y	EP 0 618 249 A (MITSUI TOATSU CHEMICALS) 5 October 1994 (1994-10-05) * claims 1-4 *	1	
A	EP 0 572 675 A (MITSUI TOATSU CHEMICALS) 8 December 1993 (1993-12-08) * claims 1-7 *	1	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			C08G
The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 20 July 2000	Examiner Von Kuzenko, M
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons</p> <p>& : member of the same patent family, corresponding document</p>			

EPO FORM 1503 03.82 (P04001)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 97 11 4395

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

20-07-2000

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0712880 A	22-05-1996	FI 955445 A	18-05-1996
		JP 8325362 A	10-12-1996
		KR 166620 B	20-03-1999
		US 5637631 A	10-06-1997
EP 0618249 A	05-10-1994	JP 7228675 A	29-08-1995
		KR 9711637 B	12-07-1997
		US 5401796 A	28-03-1995
		US 5428126 A	27-06-1995
EP 0572675 A	08-12-1993	DE 69230032 D	28-10-1999
		DE 69230032 T	03-02-2000
		FI 933471 A	05-08-1993
		KR 9707322 B	07-05-1997
		ES 2139646 T	16-02-2000
		WO 9312160 A	24-06-1993
		JP 6065360 A	08-03-1994
		US 5310865 A	10-05-1994

EPO FORM P0448

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82